### U.S. Patent Application Serial No. 10/084,925

#### **IN THE CLAIMS:**

Please **AMEND** the claims as follows:

1. (Currently Amended) A semiconductor device, comprising:

a source region formed of a semiconductor;

a drain region formed of a semiconductor of the same conductive type as that of said source region;

a channel region formed of a semiconductor between said source region and said drain region;

a gate insulating film provided on said channel region; and

a gate electrode provided on said gate insulating film and formed with a P-N junction including a

P-type semiconductor region and an N-type semiconductor region,

wherein said P-type semiconductor region and said N-type semiconductor region of said P-N

junction of said gate electrode are electrically insulated,

wherein said gate electrode includes a first gate portion provided above said channel region and

a second gate portion provided above a region which is not said channel region, said source region or said

drain region, and said second gate portion includes said P-N junction.

2. (Original) The semiconductor device according to claim 1,

wherein silicide is not formed on said P-N junction of said gate electrode.

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- 3. (Original) The semiconductor device according to claim 1, wherein said P-N junction of said gate electrode is covered with an insulating material.
- 4. (Original) The semiconductor device according to claim 3, wherein silicide is formed on a part of said gate electrode which is not covered with said insulating material.

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and

- 5. (Previously Canceled)
- 6. (Previously Amended) The semiconductor device according to claim 1, further comprising; a body region formed of a semiconductor under said channel region; a buried insulating film provided under said body region, said source region, and said drain region; a semiconductor substrate region provided under said buried insulating film.

7. (Original) The semiconductor device according to claim 1,

wherein silicide is formed on surfaces of said source region and said drain region.

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8. (Original) The semiconductor device according to claim 6, further comprising; a body contact region formed within said body region and having a higher impurity concentration than said body region.

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9. (Original) The semiconductor device according to claim 8, wherein said body contact region is formed in a region outside said second gate portion.

10-12. (Previously Canceled)